

REMARKS

Applicants respectfully request reconsideration of the rejections in view of the following remarks.

Claim Status

Claims 1–5, 8–20, and 22–43 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Thornton (U.S. 2002/0101860). Applicants respectfully traverse because the cited art fails to teach or suggest every claim limitation.

Examiner stated that claims 6–7 and 21 would be allowable if rewritten in independent form. Because the independent claims are allowable as explained below, Applicants opt not to amend the objected claims into independent form. Examiner objected to the title of the invention. Applicants accordingly amend the title. Claims 1–43 remain pending.

Rejections Under 35 U.S.C. § 102(b)

Claim 1

Independent claim 1 recites “a plurality of back-end circuits that store equal-sized frame portions in stripes.” The prior art fails to teach or suggest the quoted language. Examiner cites Thornton at ¶ 0090 as allegedly teaching the quoted language. However, at the cited location, Thornton teaches:

DSPs 225 illustratively contain eight separate DSPs 225₁, . . . , 225₈ (six of which can collectively implement 24-channel T1 operation, with eight collectively implementing 30-channel E1 operation). Each DSP, which is illustratively a model TMS320C549 DSP commercially available from Texas Instruments of Dallas, Tex., handles four simultaneous channels of digitized telephony traffic as provided by the PBX. SRAM (static random access memory) 220 contains SRAMs 220₁, . . . , 220₈, with each separate SRAM providing temporary data storage for a corresponding and different DSP.

A DSP handling simultaneous channels of digitized telephony traffic fails to teach or suggest a plurality of back-end circuits that store equal-sized frame portions in stripes as required by the claim limitation. Specifically, handling four simultaneous channels does not teach or suggest store equal-sized frame portions in stripes as required by the claim limitation. For at least this reason, independent claim 1 and dependent claims 2–5 and 8–14 are allowable over Thornton.

Additionally, claim 1 recites “wherein the internal links have dynamically assigned time slots that are staggered in time between internal links from a given front-end circuit.” The prior art fails to teach or suggest the quoted language. Examiner cites Thornton at ¶ 0091 as allegedly teaching the quoted language. However, at the cited location, Thornton teaches:

In particular, for a digitized signal appearing on any one such TDM channel (a single time slot), such as that incoming from the PBX to the gateway, a DSP assigned to that channel first converts a G.711 compressed telephony signal (typically between 56-64 kb/sec) for that channel and provided by the PBX into a G.723 compressed signal (typically between 5.6-6.4 kb/sec) to effectuate a 10:1 compression. Currently, the gateway relies on use of a “digital PBX” i.e., the PBX provides, for each of its outgoing channels, analog-to-digital conversion (digitization) and compression, according to a G.711 standard, and, for each of its incoming channels, G.711 decompression and digital-to-analog conversion. If a digital PBX were not used, then appropriate channel banks could be added between the PBX and the gateway to provide these functions.

A compression and decompression of telephony signals on a time slot fails to teach or suggest internal links that have dynamically assigned time slots that are staggered in time as required by the claim limitation. Specifically, compressing a signal to effectuate a 10:1 ratio does not teach or suggest dynamic allocation to the portions of a frame as required by the claim limitation. For at least this additional reason, independent claim 1 and dependent claims 2–5 and 8–14 are allowable over Thornton.

Claims 15, 26, and 35

Independent claim 15 recites “dynamically allocating to the portions a time slot on multiple internal links that couple the memory modules to an egress port.” Independent claims 26 and 35 recite a similar limitation. The prior art fails to teach or suggest the quoted language. Examiner cites Thornton at ¶ 0091 as allegedly teaching the quoted language. However, at the cited location, Thornton teaches:

In particular, for a digitized signal appearing on any one such TDM channel (a single time slot), such as that incoming from the PBX to the gateway, a DSP assigned to that channel first converts a G.711 compressed telephony signal (typically between 56-64 kb/sec) for that channel and provided by the PBX into a G.723 compressed signal (typically between 5.6-6.4 kb/sec) to effectuate a 10:1 compression. Currently, the gateway relies on use of a "digital PBX" i.e., the PBX provides, for each of its outgoing channels, analog-to-digital conversion (digitization) and compression, according to a G.711 standard, and, for each of its incoming channels, G.711 decompression and digital-to-analog conversion. If a digital PBX were not used, then appropriate channel banks could be added between the PBX and the gateway to provide these functions.

A compression and decompression of telephony signals on a time slot fails to teach or suggest dynamically allocating to portions of a frame a time slot on multiple internal links as required by the claim limitation. Specifically, compressing a signal to effectuate a 10:1 ratio does not teach or suggest dynamic allocation to the portions of a frame as required by the claim limitation. For at least this additional reason, independent claims 15, 26, and 35, along with their dependent claims 16–20, 22–25, 27–34, and 36–43, are allowable over Thornton.

Conclusion

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed.

The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this document. However, in the event that additional extensions of time are necessary to allow consideration of this document, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Conley Rose, P.C.'s Deposit Account No. 03-2769/2120-02500/HTDC.

Respectfully submitted,

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